

Remarks/Arguments

In an Office Action dated August 8, 2007, claims 73-82 were rejected under § 101; claims 6, 7, 14, 24, 25, 32, 42, 43, 50, 60, 61, 78, 79 and 81 were rejected under § 112, ¶ 2; claims 1-82 were provisionally rejected under obviousness-type double patenting over U.S. Appln. No. 10/699,603; claims 1, 8-13, 18, 19, 26-31, 36, 37, 44-49, 54, 55, 62-67, 72, 73 and 80 were rejected under § 102 over Perlman, U.S. Patent No. 5,844,902; claims 2-7, 20-25, 38-43, 56-61 and 74-79 were rejected under § 103 over Perlman in view of Soumiya, U.S. Patent No. 6,671,257; claims 14, 16, 32, 34, 50, 52, 68, 70, 81 and 82 were rejected under § 103 over Perlman in view of Fredericks, U.S. Patent No. 6,347,334; claims 15, 33, 51 and 69 were rejected under § 103 over Perlman in view of Lee, U.S. Appln. Pub. No. 2003/0099194; and claims 17, 35, 53 and 71 were rejected under § 103 over Perlman in view of Hongal, U.S. Appln. Pub. No. 2005/0053006. Applicant requests reconsideration in view of the remarks below.

Section 101 Rejections

Applicant has cancelled the claims.

Section 112 Rejections

Claims 6, 7, 24, 25, 42, 43, 60 and 61 have been amended to remove “words.”

Claims 14, 32, 50 and 68 have been amended to recite “a true destination address.” In these claims the frame is destination addressed to a well known address. As this well known address would not be the actual destination to which a path trace is desired, the true destination address must be present somewhere in the frame and the claims specify it is in the frame payload. Withdrawal of the rejection is requested.

Provisional Obviousness Double Patenting Rejection

Claims 1-72 were provisionally rejected under obviousness-type double patenting over application Serial No. 10/699,603. Applicant attaches a terminal disclaimer to obviate the rejection.

Section 102 Rejections

Claims 1, 19, 37, and 55

Claims 1, 19, 37 and 55 were rejected under § 102 Perlman. Applicant has amended each of the claims to specify that the switches are Fibre Channel Switches and the routes between all switches and nodes in the fabric are previously determined or are known.

The claims all require the fabric manager to add the receive and transmit port identity to the frame. Perlman does not add the port identities. The trace route or explorer frames of Perlman only adds the LAN number and bridge number through which the message has passed (col. 5, lines 58-60). Perlman does not include the source and transmit port identities as required in the claims. Thus Perlman does not teach or suggest all of the claim requirements.

Applicant submits that it would not be obvious from Perlman to add the source and transmit port identity information to the frame as required in the claim. Such information is not relevant to Perlman and its explorer messages. The explorer messages are intended to determine a route between a source and a destination with the network being a series of bridged rings. Therefore specific receive and transmit port information is not relevant and thus not of interest. Additionally, one skilled in the art would not look to explorer messages as in Perlman because all of the routes between sources and destinations in the fabric of the claims are already known. Thus the whole purpose of the explorer messages of Perlman is not needed, so one skilled in the art would not refer to them.

Applicant submits that Perlman does not teach or suggest all of the claim elements so that the rejection should be withdrawn. Thus all of the present claims are allowable.

Claims 11, 29, 47 and 65

Claims 11, 29, 47 and 65 all require the fabric manager to use normal routing rules to transmit the frame. The Office Action has cited portions of Perlman describing source routed bridges. While Applicant does not disagree that Perlman discusses source routing for normal messages, the claims are being rejected on explorer messages, which are not the frames being described at the Office Action's cited locations. Explorer messages use very different and special routing where the bridges forward the explorer messages to all LANs except the one from which it was received (col. 5, lines 63-65). Therefore Perlman very explicitly indicates that normal routing rules as required in the claims are not used for the relevant and asserted explorer messages.

Withdrawal of the rejection is requested.

Claims 13, 31, 49 and 67

Claims 13, 31, 49 and 67 require using normal routing rules if the source routing information does not indicate a directly connected device. The Office Action cites col. 3, lines 38-40 about the end system reading the message. Applicant does not understand how this citation relates to the claims. It does not involve routing at all. Further, as with claims 11, it is to a portion for normal messages, not explorer messages and therefore is further unrelated.

Applicant submits claims 13, 31, 49 and 67 are allowable.

Claims 18, 36, 54 and 72

Claims 18, 36, 54 and 72 all require determining if the switch was the original source of the frame, and if so, capturing the frame and not further transmitting it. The Office Action rejected the claims based on citations to Perlman which describe normal message routing operations from source to destination. Applicant first notes that the

bridges in Perlman are never the original destination of an explorer message. Further, as noted above, explorer messages are never forwarded to the LAN from which they originated and col. 5, line 66 to col. 7, line 8 blocks this possibility by preventing loops. Thus in Perlman if a bridge were to originate an explore frame, the bridge would never receive it back to do the operations required in the claims.

Withdrawal of the rejection is requested.

Section 103 Rejections

Claims 3-7, 21-25, 39-43 and 57-61

Claims 3-7, 21-25, 37-43 and 57-61 were rejected under § 103 over Perlman in view of Soumiya. Applicant traverses the rejection.

The Office Action cites Soumiya col. 26, lines 21-23 and col. 35, lines 21-36. Referring to col. 26, lines 21-23, a rate changing unit 105 and a rate calculating unit 104 are mentioned. Col. 25, lines 23-38 describe the rate calculating unit 104 in more detail, but basically the unit 104 simply does a calculation of dividing the transmission rate set for each output channel by the number of active virtual connections. Thus no actual data transfers are measured. Col. 25, line 39 to col. 26, line 20 describes the rate changing unit 105 in more detail, but basically the unit 105 simply detects congestion and changes the rates provided by the rate calculation unit 104 accordingly. The unit 105 also does not measure actual data transfers. Col. 36, lines 21-36 just relates to determining the number of active connections. It is stated as being done over a simple period. There are no actual data transfer rates measured, just the number of active connections is counted.

Applicant submits that the cited portions of Soumiya do not teach and receive rates for inclusion in a frame transmit, even over a first period and clearly not over a first and a second period. Applicant therefore submits that the rejection as to claims 3-7, 21-25, 39-43 and 56-61 is not properly supported and requests withdrawal.

Claims 14, 32, 50 and 68

Claims 14, 32, 50 and 68 were rejected under § 103 over Perlman in view of Fredericks. Applicant traverses the rejection.

Claims 14, 32, 50 and 68 require the frame being addressed to a well known address and a true destination address being retrieved from the frame payload. The Office Action cites col. 6, lines 29-31 of Fredericks and Table 1 and col. 5, lines 45-46.

Applicant first note that Perlman indicates that an explorer message has the destination address in the traditional destination address field in the message. Thus to convert to a format of the claims where the frame is addressed to a well known address would destroy the Perlman operation. Applicant then notes that the statement in the Office Action referencing Table 1 and col. 5, lines 45-46 is misplaced.

Perlman specifically teaches that the explorer frame is addressed to the end node. Perlman is a series of ring networks connected by bridges and routed using source routing. The Fibre Channel switch of Fredericks has no rings and does not use source routing but rather routes using FSPF based on the destination address. The references employ totally different techniques, sufficiently different that Applicant submits that the only place the Office Action could have looked to gain the required knowledge is Applicant's own disclosure, which is improper. Applicant requests some positive teaching in the references that teaches such a drastic redesign of each reference.

Further, Fredericks relates to Fibre Channel RNID ELS messages. Referencing col. 6, lines 21-34, the addressing of the message is described. It states the message is preferably sent to the nearest neighbor node, though it also notes that any node can be addressed. The fabric controller well known address is only used if the nearest neighbor node is a fabric node, a special instance. Otherwise the message is addressed directly to the other node. Fredericks does not mention anything about retrieving the true destination address from the frame payload, and would not, as the frame is addressed to the relevant item. The Office Action appears to equate the command code in the RNID ELS to the required true destination address, but that equivalence is simply incorrect when the meaning of true destination address is construed properly.

Reference to Table 1 does not help as Table 1 lists the header fields, as stated at col. 5, lines 19-22, not any payload fields.

Applicant submits that claims 14, 32, 50 and 68 are allowable.

Claims 15, 33, 51 and 69

Claims 15, 33, 51 and 69 require there to be equal cost routes and the frame is transmitted over all such routes. The Office Action brings in Lee to reject the claims. Applicant traverses the rejection. While Lee may mention the existence of equal cost routes and partially using a number of these shortest routes, it does not teach or suggest sending the frame over all of them as required in the claims. The cited portion of Lee is related to routing a frame around bottlenecks, so replicating the frame across all of the routes is actually opposed to Lee as that would teach adding many more frames to a congested network.

Applicant submits the rejection is improper and the claims are allowable.

Claims 17, 35, 53 and 71

Claims 17, 35, 53 and 71 were rejected under § 103 over Perlman in view of Hongal. Applicant has provided a Rule 131 Declaration of Applicant's attorney antedating Hongal. As a result, the rejection is improper and should be withdrawn.

Hongal has a provisional filing date of September 5, 2003. The instant application has a filing date of October 31, 2003. The Rule 131 Declaration proves conception prior to the Hongal date by providing the August 13, 2003 draft application and then proves diligence from that date to the instant filing date based on the activities of Applicant's attorney in drafting the present application.

It is well known that attorney activities in preparing a patent application to obtain a constructive reduction to practice can qualify for required diligence. See Gould v. Schawlow, 150 USPQ 634 (C.C.P.A. 1966) and Rines v. Morgan, 116 USPQ 145 (C.C.P.A. 1957). The general rule is that an attorney is not required to drop all other work and concentrate on the particular invention involved; and if the attorney has a reasonable backlog of work which he takes up in chronological order and carries out

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expeditiously, that is sufficient. Martus & Becker v. Heise, 5 USPQ 74 (C.C.P.A. 1930); Gould v. General Photonics Corp., 215 USPQ 117 (N.D. Cal. 1982); English v. Ausnit, 38 USPQ2d 1625 (Bd. Pat. App. & Int'f 1993).

The Rule 131 Declaration clearly shows that Applicant's attorney met these diligence requirements based on the legal requirements and the particular facts.

Therefore Applicant has proven that Hongal is not a proper reference and requests withdrawal of the rejection.

Conclusion

Based on the above remarks Applicant respectfully submits that all of the present claims are allowable. Reconsideration is respectfully requested.

Respectfully submitted,

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